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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,148	08/31/2001	Henricus J.M. Van De Ven	110366	8649
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	ERRIDGE, PLC		EXAM	INER
P.O. BOX 19928 ALEXANDRIA, VA 22320			TORRES VELAZQUEZ, NORCA LIZ	
•			ART UNIT	PAPER NUMBER
			1771	
			DATE MAILED: 04/29/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Bw9				
	Application No.	Applicant(s)				
	09/943,148	VAN DE VEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Norca L. Torres-Velazquez	1771				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1)⊠ Responsive to communication(s) filed on 03 A	April 2003 .					
2a) This action is <b>FINAL</b> . 2b) ☐ Thi	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-36 is/are pending in the application.						
4a) Of the above claim(s) <u>1-19</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>20-36</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)☐ Some * c)☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.	5) Notice of Inform	nary (PTO-413) Paper No(s) nal Patent Application (PTO-152)				

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## **DETAILED ACTION**

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1. Applicant's election with traverse of group II, claims 21-36 in Paper No. 8 is acknowledged.

- 2. In response to Applicants arguments, claim 20 has been included in Group II as a product-by-process claim. Therefore, elected claims of Group II comprise claims 20-36.
- It is noted that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). [MPEP 2113]
- 3. The traversal is on the ground(s) that the process recited in the claims of Group I includes all of the same product limitations of the product recited in the claims of Group I. This is not found persuasive because the product can be made by a different process that does not require the step of pre-cleaning the surface of the substrate and further, it can be made by laminating a metal sheet to the substrate.

The requirement is still deemed proper and is therefore made FINAL.

## Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention. These claims refer to "passes a Tesa tape test", which is defined on page 5 of the specification as, when removing a strip of "Tesa" tape applied to the metallized side of the composite, the substrate is not destroyed nor the metal is transferred. While the parameters of passing the test are clear, it is not clear of what a "Tesa" tape is. From reviewing the prior art, it seems that "Tesa" is a brand of tape and there are several types of "Tesa" tape.

First, if this is a trademark/trade name. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name.

Second, the specific "Tesa" tape is not identified in the specification.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 20-21, 23 25-26, 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over LIM et al. (US 6,187,696) in view of MAEKAWA et al. (US 4,637,947).

LIM et al. discloses a moisture vapor permeable, substantially liquid impermeable composite sheet material comprising a fibrous substrate and a moisture vapor permeable

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thermoplastic film layer. (Abstract) The reference teaches that the moisture vapor permeable, substantially liquid impermeable film is a polyether block copolymer such a copolymers comprised of block copolyether esters. (Column 5, lines 7-10) The reference further teaches that the basis weight of the fibrous substrate is between about 13.5 to about 40 g/m<sup>2</sup>. (Refer to Claim 2)

However, the reference does not disclose a metal layer adhered to the substrate surface.

MAEKAWA et al. discloses a heat insulation material used in winter clothes. A fibrous sheet material such as nonwoven fabrics, knitted fabrics and textile is used to support or carry a metal and the fibrous sheet material having a metal deposited surface is fixed to a heat insulating fibrous layer. (Abstract) The supporting material of the heat insulation material of their invention is composed of fibrous sheet materials such as non-woven fabrics, woven fabrics and knitted textiles, wherein it can be classified into two cases, one case in which they are made to a fabric form together and a reflecting layer of metal or non-metal material is deposited in vacuum condition or transferred onto the surface of the supporting material. (Column 2, lines 10-17) In order to make a cover under vacuum deposition process, which is one of means for forming a reflecting layer, it is possible to apply metal or non-metal such as aluminum, gold, silver, nickel and chromium. (Column 2, lines 23-26) The reference further teaches that the reference numeral 1 designates a supporting material which is composed of fibrous sheet material such as nonwoven fabrics, woven fabrics and knitted fabrics and the like. (Column 3, lines 34-38) Figure 2, shows a supporting material 1 having a reflecting layer 2 and a heat insulating fibrous layer 3. (Column 4, lines 5-11) With regards to claim 24, it is noted that woven or knitted fabrics would provide for the claimed textile fabric whose filaments are spaced apart.

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It is noted that LIM et al. and MAEKAWA et al. are silent with respect to the claimed "passing a Tesa tape test". However, it is reasonable to presume that the claimed property is inherent to the invention of LIM et al. in view of MAEKAWA et al.. Support for said presumption is found in the use of the same starting materials (i.e. polyether ester film and metal layer), like processes of making the articles (i.e., vapor deposition), and the production of similar end-products (i.e., insulation textiles/materials, etc...). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594.

With regards to claim 29, MAEKAWA et al. teaches that a porous cover may be arranged on the metal deposited surface of the fibrous sheet material in order to avoid the occurrence of a slimy feeling under adhesion of moisture generated from the body by direct contact of the skin of the user to the metal deposited surface. (Column 1, lines 45-58)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the laminate and provide it with a metal layer with the motivation of improving the heat insulation characteristics of the laminate as disclosed by MAEKAWA et al. (Column 1, lines 11-15)

7. Claims 20-21, 23 25-26, 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over HORN (US 5,447,783) in view of MAEKAWA et al. (US 4,637,947).

HORN teaches that vapor-permeable, waterproof bicomponent film structures made from a hydrophobic copolyetherester elastomer film layer and a hydrophilic copolyetherester elastomer film layer are known in the art. Such film structures are often bonded to a textile material to result in a so-called "breathable, waterproof" fabric. (Column 1, lines 7-13)

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HORN teachings provide the claimed nonporous, water-vapor-permeable, watertight, hydrophilic flat substrate.

However, the reference does not disclose a metal layer adhered to the substrate surface.

MAEKAWA et al. discloses a heat insulation material used in winter clothes. A fibrous sheet material such as nonwoven fabrics, knitted fabrics and textile is used to support or carry a metal and the fibrous sheet material having a metal deposited surface is fixed to a heat insulating fibrous layer. (Abstract) The supporting material of the heat insulation material of their invention is composed of fibrous sheet materials such as non-woven fabrics, woven fabrics and knitted textiles, wherein it can be classified into two cases, one case in which they are made to a fabric form together and a reflecting layer of metal or non-metal material is deposited in vacuum condition or transferred onto the surface of the supporting material. (Column 2, lines 10-17) In order to make a cover under vacuum deposition process, which is one of means for forming a reflecting layer, it is possible to apply metal or non-metal such as aluminum, gold, silver, nickel and chromium. (Column 2, lines 23-26) The reference further teaches that the reference numeral 1 designates a supporting material which is composed of fibrous sheet material such as nonwoven fabrics, woven fabrics and knitted fabrics and the like. (Column 3, lines 34-38) Figure 2, shows a supporting material 1 having a reflecting layer 2 and a heat insulating fibrous layer 3. (Column 4, lines 5-11) With regards to claim 24, it is noted that woven or knitted fabrics would provide for the claimed textile fabric whose filaments are spaced apart.

It is noted that HORN and MAEKAWA et al. are silent with respect to the claimed "passing a Tesa tape test". However, it is reasonable to presume that the claimed property is inherent to the invention of HORN in view of MAEKAWA et al.. Support for said presumption

is found in the use of the same starting materials (i.e. polyether ester film and metal layer), like processes of making the articles (i.e., vapor deposition), and the production of similar end-products (i.e., insulation textiles/materials, etc...). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594.

With regards to claim 29, MAEKAWA et al. teaches that a porous cover may be arranged on the metal deposited surface of the fibrous sheet material in order to avoid the occurrence of a slimy feeling under adhesion of moisture generated from the body by direct contact of the skin of the user to the metal deposited surface. (Column 1, lines 45-58)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the laminate and provide it with a metal layer with the motivation of improving the heat insulation characteristics of the laminate as disclosed by MAEKAWA et al. (Column 1, lines 11-15)

8. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over HORN and MAEKAWA et al. as applied to claim 21 above, and further in view of SEGAWA et al. (US 4,068,034).

The prior art of HORN and MAEKAWA et al. fails to disclose the thickness of the metal layer.

SEGAWA et al. teaches a heat-insulation material. The reference teaches that the product is obtained by adhering a layer of a metal to one surface of a polyvinylidene fluoride film and adhering a priming material to the opposite surface of the metal layer. The adhesion of the metal layer to one surface of the film can be accomplished by ordinary means such as vacuum deposition or plating. The metal layer ordinarily has a thickness roughly in the range of

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from 0.01 to 0.5 microns (10 to 50 nm). The term "priming material" means a heat-insulation material or reinforcing material such as paper, fabric, glass cloth, wood sheet, plastic, foam plastic, or metal. (Column 2, lines 44-62)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the laminate and provide it with a metal layer thickness of 0.01 to 0.5 microns with the motivation of producing a material with outstanding insulating characteristics that will avoid the problem of oxidation of the metal layer of the prior art as disclosed by SEGAWA et al. (Column 1, lines 15-27 and line 55).

9. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over HORN (US 5,447,783) in view of MAEKAWA et al. (US 4,637,947) as stated on paragraph 7 and further in view of LIM et al.

The MAEKAWA et al. reference teaches the use of knitted fabrics in the composite, while LIM et al. teaches that the basis weight of the fibrous substrate is between about 13.5 to about 40 g/m<sup>2</sup>. (Refer to Claim 2)

While the prior art of record does not teach the thickness of the textile fabric, it is recognized as result effective variable in this field of endeavor and it has been held that discovering optimum values would have been or result effective variables involves only routine experimentation. I.e. the thickness of the textile used in the composite will depend on the final product or use of the composite.

#### Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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VAUGHN et al. (US 5,458,955) - refer to Example 5

De LEEUW et al. (US 4,344,998)

11. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 703-306-

5714. The examiner can normally be reached on Monday-Thursday 7:30-5:00 pm and alternate

Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9310 for regular

communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0661.

nlt

April 24, 2003

ELIZABETH M. COLE
PRIMARY EXAMINER

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